

REMARKS

Favorable reconsideration of this application, as amended, is respectfully requested.

Claims 31-46 and 52-54 are pending further consideration.

Claims 31, 33 and 36 have been amended to address the rejection under 35 U.S.C. § 112, first paragraph, regarding the feature of reading by another similar controller. Regarding the portions of the § 112, first paragraph rejection directed to “imminent failure” and the “one filter” issues, Applicants respectfully disagree.

Applicants note that the claims in question recite a filter module, not merely a single filter or one filter. It is apparent that detection of imminent failure of a filter module can be accomplished based on an indication provided by a water (or fluid) quality sensor as recited in independent Claims 31, 34, 37 and 38. While the specific design details for a given application may vary depending on such factors as water (or fluid) quality tolerances, filter size, flow rate or the like, the concept of detecting imminent failure of a filter module, regardless of filter specifics, using a water (or fluid) quality sensor would be well understood by one of ordinary skill in the art. Accordingly, Applicants believe that the use of the term “imminent failure” in the claims is enabling. Moreover, the recitation of a “filter module,” within the meaning of the instant application, is also believed to be enabling.

Claim 31 has also been amended to address the rejection under 35 U.S.C. § 112, second paragraph.

Claims 31-46 and 52-54 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combination of Astle et al. (US 2003/0168389), Selby (U.S. Patent No. 4,246,101) and Carson et al. (U.S. Patent Publication No. 2006/0021944).

It is apparent that independent Claims 31, 34, 37, 38, 41, 43, 45, 52 and 54 distinguish patentably from the cited references. Accordingly, the rejections under § 103 are respectfully traversed.

Applicants note that the rejection as presented in the outstanding Office Action is in a summary form and does not address the individual elements of each independent claim separately. Accordingly, Applicants are not able to respond to a specific basis for rejection of individual claim elements. In response to the rejection, Applicants present below representative features of each independent claim that are believed to distinguish patentably over the cited references.

Amended Claim 31 recites that the controller is configured to control the pump to continue pumping until a predetermined quantity of fluid has been pumped and to read the filter module unique identifier when the fluid quality sensor gives a second indication indicating that the filter module will fail imminently, and to read the filter module unique identifier again once the predetermined quantity of fluid has been pumped and to control the pump to stop pumping when the unique identifier read after pumping the predetermined quantity of fluid matches the unique identifier read when the fluid quality sensor gave the second indication.

Claim 34 recites that the controller is also configured to continue the pure water generation until a predetermined quantity of fluid has been pumped if, during the pure water generation, the fluid quality sensor gives a second indication indicating that the filter module will fail imminently, and thereafter to halt pumping until the filter module is exchanged.

Claim 37 recites that the controller is configured to either record an identifier read from the filter module in a list of used filter modules or program a data carrier thereof

with a token indicating that the filter module is used; in either case, the controller being configured to thereafter not pump fluid if the same filter module's data carrier is later read by the controller such that a reuse of said filter module is prevented.

Claim 38 recites that the controller is also configured to control the pump to continue pumping until a predetermined quantity of fluid has been pumped if, during a pumping operation, the fluid quality sensor gives a second indication, and thereafter to control the pump to not pump fluid until said filter module is replaced with a different one not corresponding to the unique one.

Claim 41 recites that when the resistivity monitor detects a low resistivity and thereby breakthrough of contaminants and a consequent need for replacement of at least the first deionization stage, the second deionization stage is able to continue to filter so as to provide continued filtration for a time after breakthrough of said first deionization stage.

Claim 43 recites a controller configured to indicate an expiration of said replaceable deionizing filter module when said resistivity sensor indicates a predefined value.

Claim 45 recites a resistivity sensor located between said first and second filter portions and configured to measure a resistivity of water flowing from said first portion to said second portion.

Claim 52 recites that the controller is configured to read a unique identifier from a respective data carrier and compare the read unique identifier, when a filter module is received by the station, to at least one other identifier and to prevent a water preparation operation or proceed with a water preparation operation responsively to a result of the comparison.

Claim 54 recites that the controller is further configured to prevent the use of the first filter module if the status indicated by the data carrier thereof indicates the first filter module was previously used.

Astle is directed to a system for monitoring the performance of fluid treatment cartridges. However, Astle fails to teach or suggest a controller configured to control pumping as set forth in Claims 31, 34, 37 and 38. Astle, as noted in the outstanding Office Action, also fails to teach or suggest a resistivity sensor as set forth in Claims 41, 43 and 45. Further, Astle fails to teach or suggest preventing a water preparation operation, or controlling to prevent the use of a filter, as set forth in Claims 52 and 54, respectively.

Selby, a secondary reference, is directed to a water recycling system. Selby describes a water cloudiness sensor sending a signal to a microprocessor and shutting down a system in the event of a filter failure. See, e.g., Selby, col. 3, lines 54-57. However, this is in contrast to Applicants' invention, which stops pumping based on a fluid quality sensor indication and having pumped a predetermined quantity of fluid, as set forth in Claims 31, 34, 37 and 38. Selby contains no teaching or suggestion of the above-mentioned claim features. Accordingly, Selby fails to remedy the deficiencies of Astle with respect to the above-mentioned independent claims.

Carson, another secondary reference, is directed to an ion exchange regeneration and UPW treatment system. While Carson describes a process for regenerating ion exchange resin, Carson fails to remedy the deficiencies of Astle and Selby discussed above.

Thus, whether viewed individually or in combination, the cited references fail to teach or suggest at least the above-mentioned features of Claims 31, 34, 37, 38, 41, 43,

45, 52 and 54. Accordingly, as these independent claims, and their respective dependents, distinguish patentably from the cited references, the rejection is untenable and should be withdrawn.

Claim 32 has been amended for consistency.

Applicants respectfully request an early Notice of Allowance.

Should the Examiner believe that any further action is necessary to place this application in better form for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 (T4342-14498US01) any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby requested.

Respectfully submitted,

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